

REMARKS

The Examiner is thanked for the due consideration given the application.

Claims 1, 5-7 and 10-30 are pending in the application. The allowance of claims 11-14 is noted with appreciation. Claims 3 and 4 have been canceled and their subject matter has been generally incorporated into claim 1.

No new matter is believed to be added to the application by this amendment.

Rejections Based On KNAPP et al.

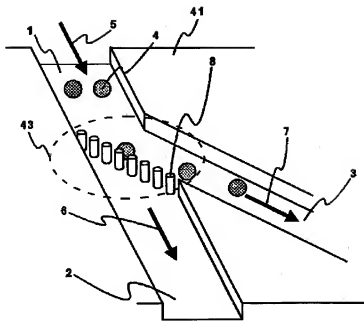
Claims 1, 3-7, 10 and 20-27 have been rejected under 35 USC §103(a) as being unpatentable over KNAPP et al. (U.S. Patent 6,235,471) in view of WILKSWO et al. (U.S. Patent 7,534,601). Claims 15-19 have been rejected under 35 USC §103(a) as being unpatentable over KNAPP et al. in view of WILKSWO et al., and further in view of SUNDBERG et al. (U.S. Patent 6,086,825).

These rejections are respectfully traversed.

Newly applied WILKSWO et al. describes a filter that includes multiple posts spaced apart from each so as not to allow cells to pass through it for holding cells in a bioreactor (see column 8, lines 32-42).

In contrast this to the present invention, which pertains to a particle manipulation unit that is illustrated, by way of example, in Figure 1 of the application, which is reproduced below.

FIG. 1



In the present invention, a plurality of obstacles is arranged so as to limit permeation of one direction of the particles in the solution like WILKSWO et al. However, the present invention is much different from WILKSWO et al. in that the obstacles are arranged so that the direction of force causing flow of the particles is inclined to lie non-normal to, or non-parallel with the direction of arrangement of the obstacles. Therefore, in the present invention, it is possible to suppress the deposition of the particles in the filter, and to guide the particles to the direction of flow of particles.

This is different from the case of using the filter membrane technology applied in the Official Action, because the filter membrane is unable to be used for the purpose of collecting the particles which are unable to be passed through

the filter membrane although it is possible not to pass the particles even in a cross-flow type.

The main reasons are as below.

(1) A surface of the filter membrane is not as flat as the particles treated by the present invention. Therefore, it makes it impossible to absorb the particles which are unable to be passed through the filter membrane and to guide such particles to another direction.

(2) A turbulent flow generates on a surface of the filter membrane, which is different from laminar flow generated in micro volume the present invention.

KNAPP et al. and PRINCE et al. have been discussed in the previous response and, for brevity, this discussion is not repeated here.

One of ordinary skill and creativity would thus fail to produce independent claims 1, 7 and 15 of the present invention from a knowledge of the applied art references. A *prima facie* case of unpatentability has thus not been made. Claims depending upon claims 1, 7 or 15 are patentable for at least the above reasons.

These rejections are believed to be overcome, and withdrawal thereof is respectfully requested.

Conclusion

The Examiner is thanked for considering the Information Disclosure Statement filed June 2, 2005 and for making an initialed PTO-1449 Form of record in the application.

Prior art of record but not utilized is believed to be non-pertinent to the instant claims.

The rejections are believed to have been overcome, obviated or rendered moot, and no issues remain. The Examiner is accordingly respectfully requested to place the application in condition for allowance and to issue a Notice of Allowability.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

/Robert E. Gozner/
Robert E. Gozner, Reg. No. 42,593
209 Madison Street, Suite 500
Alexandria, VA 22314
Telephone (703) 521-2297
Telefax (703) 685-0573
(703) 979-4709

REG/dp